

II. *New Genera and Species from the Belly-River Series*  
(*Mid-Cretaceous*). By LAWRENCE M. LAMBE.

The history of geological research by the Canadian Surveyors in the Belly-River district is explained at pp. 25-28, and then, at pp. 28-81, detailed descriptions are given of five fishes, one batrachian, twenty-six reptiles, and three mammals—altogether thirty-four, of which eleven are new. There are two short comparative tables of generic features of *Monoclonius* and *Polygonax* at p. 68 and specific of *Trachyodon* and *Pteropelyx* at p. 77.

*The Evolution of the Northern Part of the Lowlands of South-eastern Missouri.* By C. F. MARRIET, Professor of Geology. Pp. vii & 63; 7 plates of views and maps. 8vo. Published by the University of Missouri. 1902.

THIS memoir belongs to vol. i. of 'The University of Missouri Studies.' It is very properly directed to the description and explanation of a portion of the State itself. This south-eastern part abuts on the western bank of the Mississippi below its junction with the Missouri River and above that with the Ohio. The northern part of the area is occupied by belts of low lands and ridges of no great height; it is limited on the west by the Ozark limestone-range. The relative levels and breadths are very carefully recorded, and their surface-characters are indicated by a few photographs in plates i. and ii.; and pl. iii. gives an admirable view of a crowded, melancholy, water-logged cypress-swamp. To show how the natural drainage of the country is traceable through its many changes, by the silting and banking-up of the rivers and the changes of their channels, is the object of the author, who, with his friends, has taken great pains to show that the Mississippi is now occupying its third successive channel, having been modified more than once by its junction with the Ohio River. Necessarily the relative hardness and softness of the strata composing the district have been important factors in this history, and so also has been from time to time the influx of water at the close of glacial periods. The Trenton Limestone (Lower Silurian) is at the base, constituting also the flanking Ozark territory, and seen in the bed of the Mississippi (pl. ii.). After the period of this being uplifted and eroded, Tertiary strata, as clay (Idalia), sands (Benton), and gravels (Princeton), came to be deposited there; and after a while the valley-deposits, namely, the Lafayette sands and gravels, the Loess, and the Terrace loam. The local distribution of all of these is shown by the map pl. vii.